

1. Applicant's election without traverse of species A (figs. 1-2) in the reply filed on 2/28/2007 is acknowledged.

Claims 1-6, 8-9, 11, 14-23, and 31-32 read on the elected species and an action on these claims follows.

Claims 7, 10, 12-13, and 24-30 are withdrawn from consideration as being directed to non-elected species or embodiments.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8, 11, 14-23, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Grassl et al. (012).

Grassl et al. (012) disclose a cartridge assembly comprising:

- |   |                     |
|---|---------------------|
| a) a support body;  | 29, 26              |
| b) a central longitudinally channel;                              | 23                  |
| c) a plurality of projectiles;                                    | 24a, 24b, 24c, 24d  |
| d) a plurality of chambers around the channel;                    | contain 31s and 32s |
| e) propellant charges;  | 31a, 31b, 31c, 31d  |
| f) a plurality of apertures;                                      | 30a, 30b, 30c, 30d  |
| g) ignition means;  | 32a, 32b, 32c, 32d  |
| h) apertures are provided in the tubular wall portion; see fig. 5 |                     |

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|--|---------------------------------|
| i) encased charges;                          | 31's (see fig. 5)               |
| j) transverse annular walls of chambers;     | see chamber walls in fig. 5     |
| k) a cover to close off outer wall;          | see portion of 29 adjacent 31's |
| l) an outer cylindrical shape; and           | see figs. 1-2 and 4-5           |
| m) a wall having the plurality of apertures. | 23; col. 4, lines 56-59         |

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grassl et al. (012) in view of Lynn (271).
6. Grassl et al. (012) apply as previously recited. However, undisclosed is an obturation means or seal for the propellant charge apertures. Lynn (271) teaches an obturation means or seal for the propellant charge apertures (53, col. 3, lines 55-61). Applicant is selecting a sealing means known in this art and putting it to use as it is already commonly known to be used with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Lynn to the Grassl et al. cartridge assembly and have a cartridge assembly with associated obturation means.
7. Claims 1-6, 11, 14-23, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dwyer (395) in view of Meyer et al. (412).

O'Dwyer (395) discloses a cartridge assembly comprising:

- |                    |    |
|--------------------|----|
| a) a support body; | 61 |
|--------------------|----|

b) a central longitudinally channel;	inside 61
c) a plurality of projectiles;	65, 66
d) a plurality of chambers;	contain 123 (see fig. 16)
e) propellant charges; and	123
f) ignition means.	129

However, undisclosed is the propellant charge located in a chamber with associated aperture arranged around the central longitudinal axis wherein the chamber extends fully around the central channel. Meyer et al. (412) teach a propellant charge located in a chamber with associated aperture arranged around the central longitudinal axis wherein the chamber extends fully around the central channel (45, 42, see figs. 1 and 2). Meyer et al. also teaches an exterior cover enclosing the charge (see fig. 1); and transverse walls forming a propellant chamber (see fig. 1). Applicant is substituting one location for the propellant charges for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Meyer et al. to the O'Dwyer cartridge assembly and have a cartridge assembly with differently located propellant charges.

8. Applicant's arguments with respect to claims 1-6, 8-9, 11, 14-23, and 31-32 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877 and whose e-mail address is ([Stephen.Johnson@uspto.gov](mailto:Stephen.Johnson@uspto.gov)). The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The Central FAX phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

/Stephen M. Johnson/  
Primary Examiner, Art Unit 3641

Stephen M. Johnson  
Primary Examiner  
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SMJ  
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